

# Fluoride Ion Cleaning component repair

HF ION CLEANING

H2 HEAT TREATMENT

CVD COATING

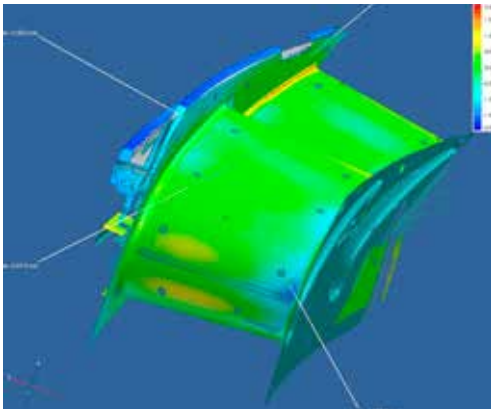
Proper repair and brazing of hot section gas turbine and yet engine components requires clean parts. Electron's Fluoride Ion Cleaning (FIC) furnaces are used for the effective removal of protective oxides from the surface of high-strength Superalloys.

In the jet engine and industrial gas turbine components refurbishment business, brazing cracks in investment cast parts made of expensive alloys is required on a regular base. Hot section jet engine and industrial gas turbine components are damaged over time due to oxidation, sulphidation, hot corrosion, fatigue, or foreign object damage and complete cleaning of the parts and cracks is required to ensure proper brazing.

ELECTRON Thermal Processing Equipment offers the industry's most advanced cleaning and coating furnace equipment with the highest capacity amongst the industry.



The HF Ion Cleaning furnace offers a safe and highly effective process for the removal of alumide coatings and/or oxides from hot section jet engine and industrial gas turbine components. For even better cleaning of deep cracks and inside internal cooling passages the HF Ion Cleaning furnace has the capability to operate in a modulating pressure mode. This process of reducing and increasing the operating pressure increases the cleaning efficiency and results in the best possible preparation of your parts for further processing e.g. brazing.



The Fluoride Ion Cleaning furnace has a modular design and with a single work station and a separate, electrical heated bell furnace. Additional work stations can be added to perform other processes such as:

- Hydrogen Fluoride Ion cleaning;
- Vapour Phase Aluminizing (VPA);
- Vapour Phase Chromizing (VPC);
- Chemical Vapour Deposition (CVD);
- Heat treatment under controlled atmosphere.

Superior design features, more than 25 years of experience in furnaces and heat technology, after market quality service and a growing list of satisfied customers makes ELECTRON the best qualified company to supply the HF Ion Cleaning furnaces and other thermal processing equipment that meets your requirements.